



## Complete Summary

---

### TITLE

Diabetes mellitus: percent of patients with a diagnosis of diabetes mellitus who have had a full lipid panel during the past year and the most recent LDL-C is less than 100 mg/dL.

### SOURCE(S)

Office of Quality Performance. FY 2009, Q2 technical manual for the VHA performance measurement system. Washington (DC): Veterans Health Administration; 2009 Jan 5. various p.

## Measure Domain

### PRIMARY MEASURE DOMAIN

Outcome

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

### SECONDARY MEASURE DOMAIN

Process

## Brief Abstract

### DESCRIPTION

This measure is used to assess the percent of patients with a diagnosis of diabetes mellitus who have had a full lipid panel during the past year and the most recent low-density lipoprotein-cholesterol (LDL-C) is less than 100 mg/dL.

### RATIONALE

Improved control of cholesterol and lipids (for example, high-density lipoprotein [HDL], low-density lipoprotein [LDL], and triglycerides) can reduce cardiovascular complications by 20% to 50%.

### PRIMARY CLINICAL COMPONENT

Diabetes mellitus; lipid panel; low-density lipoprotein-cholesterol (LDL-C)

## **DENOMINATOR DESCRIPTION**

Eligible patients from the NEXUS Clinics cohort with diabetes mellitus age 18 to 75 (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

## **NUMERATOR DESCRIPTION**

Patients with diabetes mellitus having full lipid panel in the past year and the most recent low-density lipoprotein-cholesterol (LDL-C) is less than 100 mg/dL (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

### **Evidence Supporting the Measure**

#### **EVIDENCE SUPPORTING THE CRITERION OF QUALITY**

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

### **Evidence Supporting Need for the Measure**

#### **NEED FOR THE MEASURE**

Unspecified

### **State of Use of the Measure**

#### **STATE OF USE**

Current routine use

#### **CURRENT USE**

External oversight/Veterans Health Administration  
Internal quality improvement

### **Application of Measure in its Current Use**

#### **CARE SETTING**

Ambulatory Care  
Physician Group Practices/Clinics

#### **PROFESSIONALS RESPONSIBLE FOR HEALTH CARE**

Advanced Practice Nurses  
Physician Assistants  
Physicians

#### **LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED**

Single Health Care Delivery Organizations

#### **TARGET POPULATION AGE**

Age 18 to 75 years

#### **TARGET POPULATION GENDER**

Either male or female

#### **STRATIFICATION BY VULNERABLE POPULATIONS**

Unspecified

### **Characteristics of the Primary Clinical Component**

#### **INCIDENCE/PREVALENCE**

Unspecified

#### **ASSOCIATION WITH VULNERABLE POPULATIONS**

Unspecified

#### **BURDEN OF ILLNESS**

Complications of diabetes include:

- Heart disease is the leading cause of diabetes-related deaths. Adults with diabetes have heart disease death rates about 2 to 4 times higher than adults without diabetes.
- Diabetes is the leading cause of new cases of blindness among adults age 20 to 74.
- Diabetic retinopathy causes 12,000 to 24,000 new cases of blindness each year.
- More than 60% of nontraumatic lower-limb amputations in the United States occur among people with diabetes.

#### **EVIDENCE FOR BURDEN OF ILLNESS**

Office of Quality Performance. FY 2009, Q2 technical manual for the VHA performance measurement system. Washington (DC): Veterans Health Administration; 2009 Jan 5. various p.

## UTILIZATION

Unspecified

## COSTS

Unspecified

## Institute of Medicine National Healthcare Quality Report Categories

## IOM CARE NEED

Living with Illness

## IOM DOMAIN

Effectiveness

## Data Collection for the Measure

## CASE FINDING

Users of care only

## DESCRIPTION OF CASE FINDING

Eligible patients from the NEXUS Clinics cohort\* with diabetes mellitus age 18 to 75

\*Refer to the original measure documentation for patient cohort description.

## DENOMINATOR SAMPLING FRAME

Patients associated with provider

## DENOMINATOR INCLUSIONS/EXCLUSIONS

### Inclusions

Eligible patients from the NEXUS Clinics cohort\* with diabetes mellitus age 18 to 75

*\*Eligible diabetes mellitus patients:* Meets NEXUS Clinics cohort selection criteria **and** has a diagnosis of diabetes upon Computerized Patient Record System (CPRS) chart review. Refer to the original measure documentation for patient cohort description.

### Exclusions

- Patients greater than 75 years of age or under 18 years
- Patients with a diagnosis of gestational diabetes
- Hyperglycemia not otherwise specified (NOS)

- Steroid induced hyperglycemia

## **RELATIONSHIP OF DENOMINATOR TO NUMERATOR**

All cases in the denominator are equally eligible to appear in the numerator

## **DENOMINATOR (INDEX) EVENT**

Clinical Condition  
Encounter

## **DENOMINATOR TIME WINDOW**

Time window precedes index event

## **NUMERATOR INCLUSIONS/EXCLUSIONS**

### **Inclusions**

Patients with diabetes mellitus having full lipid panel in the past year and the most recent low-density lipoprotein-cholesterol (LDL-C)\* is less than 100 mg/dL

\*LDL-C: The most recent LDL-C will be used in this measure. The LDL-C may be either direct or calculated.

### **Exclusions**

If no LDL-C was recorded during the past year, the result is assumed to be poor. It will be included in the denominator, but not numerator - counts against the facility.

If fasting triglycerides are over 400 and LDL-C value is noted to be invalid -- it is considered by default to exceed 100. It is included in the denominator but not the numerator (counts against the facility).

## **MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS**

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

## **NUMERATOR TIME WINDOW**

Fixed time period

## **DATA SOURCE**

Administrative data  
Medical record

## **LEVEL OF DETERMINATION OF QUALITY**

Not Individual Case

**OUTCOME TYPE**

Clinical Outcome

**PRE-EXISTING INSTRUMENT USED**

Unspecified

**Computation of the Measure**

**SCORING**

Rate

**INTERPRETATION OF SCORE**

Better quality is associated with a higher score

**ALLOWANCE FOR PATIENT FACTORS**

Unspecified

**STANDARD OF COMPARISON**

Internal time comparison

**Evaluation of Measure Properties**

**EXTENT OF MEASURE TESTING**

Unspecified

**Identifying Information**

**ORIGINAL TITLE**

Diabetes mellitus - outpatient: LDL-C less than 100 mg/dL.

**MEASURE COLLECTION**

[Fiscal Year \(FY\) 2009: Veterans Health Administration \(VHA\) Performance Measurement System](#)

**MEASURE SET NAME**

[Performance Measures](#)

**MEASURE SUBSET NAME**

[Effectiveness of Care -- Diabetes](#)

**DEVELOPER**

Veterans Health Administration

**FUNDING SOURCE(S)**

Unspecified

**COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE**

Unspecified

**FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST**

Unspecified

**ADAPTATION**

Measure was not adapted from another source.

**RELEASE DATE**

2002 Nov

**REVISION DATE**

2009 Jan

**MEASURE STATUS**

This is the current release of the measure.

This measure updates a previous version: Office of Quality and Performance (10Q). FY 2008, Q1 technical manual for the VHA performance measurement system. Washington (DC): Washington (DC); 2007 Oct 31. 315 p.

**SOURCE(S)**

Office of Quality Performance. FY 2009, Q2 technical manual for the VHA performance measurement system. Washington (DC): Veterans Health Administration; 2009 Jan 5. various p.

**MEASURE AVAILABILITY**

The individual measure, "Diabetes Mellitus - Outpatient: LDL-C Less Than 100 mg/dL," is published in "FY 2009, Q2 Technical Manual for the VHA Performance Measurement System."

For more information contact:

Department of Veterans Affairs  
Office of Quality and Performance (10Q)  
ATTN: Lynnette Nilan, E-mail: [lynnette.nilan@va.gov](mailto:lynnette.nilan@va.gov) or  
Tammy Czarnecki, E-mail: [tammy.czarnecki2@va.gov](mailto:tammy.czarnecki2@va.gov)

## **NQMC STATUS**

This NQMC summary was completed by ECRI on November 9, 2004. The information was verified by the measure developer on December 10, 2004. This NQMC summary was updated by ECRI Institute on January 10, 2008. The information was not verified by the measure developer. This NQMC summary was updated again by ECRI Institute on December 23, 2009. The information was verified by the measure developer on March 22, 2010.

## **COPYRIGHT STATEMENT**

No copyright restrictions apply.

## **Disclaimer**

### **NQMC DISCLAIMER**

The National Quality Measures Clearinghouse™ (NQMC) does not develop, produce, approve, or endorse the measures represented on this site.

All measures summarized by NQMC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public and private organizations, other government agencies, health care organizations or plans, individuals, and similar entities.

Measures represented on the NQMC Web site are submitted by measure developers, and are screened solely to determine that they meet the NQMC Inclusion Criteria which may be found at <http://www.qualitymeasures.ahrq.gov/about/inclusion.aspx>.

NQMC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or its reliability and/or validity of the quality measures and related materials represented on this site. The inclusion or hosting of measures in NQMC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding measure content are directed to contact the measure developer.

[Copyright/Permission Requests](#)

Date Modified: 5/17/2010

